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CONTENTS:

LISTS OF COLEOPTERA AND LEPIDOPTERA COLLECTED IN HAMILTON, MORTON AND CLARK COUNTIES, KANSAS, BY THE ENTOMOLOGICAL EXPEDITIONS OF THE UNIVERSITY OF KANSAS IN 1902 AND 1903, *F. H. Snow.*

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LISTS OF COLEOPTERA AND LEPIDOPTERA

COLLECTED IN HAMILTON, MORTON AND CLARK COUNTIES, KANSAS, 1902 AND 1903.

BY F. H. SNOW.

A combination of two papers, read at the thirty-fifth and thirty-sixth annual meetings of the Kansas Academy of Science, January 2, 1903, and November 27, 1903.

THE following lists represent a portion of the entomological work of the two scientific collecting expeditions to southwestern Kansas in charge of the writer in the years above named. His associates in 1902 were his son, Frank L. Snow, Mr. E. S. Tucker, museum assistant in the University, and Roy Moodie and Will Bailey, students. The duration of the expedition was only three weeks, from May 30 to June 20. Two camps were occupied—the first at Shanstrom's grove, a mile and a half east of Coolidge, in Hamilton county, on the banks of the Arkansas river; the second at Point of Rocks, in Morton county, on the Cimarron river, in the extreme southwestern corner of Kansas. The writer had not previously collected insects in western Kansas farther south than Wallace county nor earlier in the season than July.

In 1903 the party consisted of Dr. C. F. Adams, Eugene Smyth, and Roy Rauch, in addition to the director, and the single camp was located at Englewood, in Clark county, about a mile from Bullard creek, a tributary of the Cimarron river, and about seven miles from the latter stream. This camp was occupied for seven weeks—from May 19 to July 1—and a careful survey was made of the entomological life of the surrounding country. As might have been expected, the character of this fauna was more Texan than had previously been observed in Kansas, our camp being only about two miles from the Oklahoma line and not more than fifty miles from the northern line of Texas.

The results of these two expeditions were extremely satisfactory, adding more than three hundred species to the lists of species previously recorded as occurring in Kansas, and furnishing valuable data for a future study of geographical distribution.

For the identification of species not readily determinable from the University collections, the writer is under obligations to Mr. Charles Liebeck and Mr. H. C. Fall.

A report on the species taken in the other orders of insects will appear at a later date.

LIST OF COLEOPTERA.

Henshaw's numbers. Abbreviations: H., for Hamilton county; M., for Morton county; C., for Clark county.

Family CICINDELIDÆ.

19. Cicindela scutellaris Say. H. M. C.
21. pulchra Say. H. M.
25. purpurea Oliv. C.
25*a*. audubonii Lec. C.
25*b*. graminea Schaupp. C.
25*i*. splendida var. denverensis Casey. H. C. New to Kansas.
26. formosa Say. H. M. C.
26*b*. venusta Lec. H. C.
28. fulgida Say. H. C.
32. vulgaris Say. H. C.
33. repanda Dej. H. M. C.
33. var. unijuncta Casey. H. M. C.
35. hirticollis Say. M.
35. var. ponderosa Thompson. H. M. C.
40. punctulata Fab. H. M. C.
40*a*. micans Fab. H. M. C.
45. cuprascens Lec. C.
50. nevadica-knausii Leng. H. C. New to Kansas.
58. circumpicta Laf. C.
59. togata var. apicalis W. Horn. C.

Family CARABIDÆ.

124. Calosoma externum Say. C.
126. protractum Lec. C. New to Kansas.
127. scrutator Fab. H. C.
134. lugubre Lec. H. C. New to Kansas.
136. triste Lec. C.
137. obsoletum Say. H. C.
215. Pasimachus duplicatus Lec. C. New to Kansas.
217. elongatus Lec. H. M. C.
220. Scarites subterraneus Fab. C.

237. Dyschirius sphæricollis Say. H.
259. Clivina impressifrons Lec. H.
273. ferrea Lec. C.
277. postica Lec. C.
285. Schizogenius ferrugineus Putz. C.
311. Bembidium coxendix Say. H.
316. bifossulatum Lec. C.
366. cordatum Lec. C.
381. dorsale Say. H.
387. variegatum Say. H.
388. intermedium Kirby. C.
394. constrictum Lec. H.
397. dejectum Casey. H. New to Kansas.
408. dubitans Lec. H. New to Kansas.
440. Tachys corruscus Lec. H. New to Kansas.
461. incurvus Say. H.
524. Pterostichus substriatus Lec. H. M. C. Taken also in Ford county.*
525. constrictus Say. H. M. C.
555. permundus Say. H.
563. texanus Lec. H.
564. sayi Brullé. H. C.
666. Amara confusa Lec. C. New to Kansas.
682. subænea Lec. C.
683. musculus Say. H. C.
710. Diplochila laticollis Lec. H.
713. Dicælus lævipennis Lec. H. New to Kansas.
732. Badister pulchellus Lec. H. New to Kansas.
739. flavipes Lec. H. New to Kansas.
772*b*. Platynus viridis Lec. H.
773. decorus Say. H.
774*b*. texanus Lec. H.
815. placidus Say. H.
847. Casnonia pennsylvanica Linné. H. C.
851. Galerita janus Fab. H. C.
872. Lebia grandis Hentz. M. C.
882. viridis Say. H. C.
895. scapularis Dej. C.
926. Philophuga viridicollis Lec. C.
939. Cymindis laticollis Say. C.
941. planipennis Lec. H.
960. Helluomorpha texana Lec. H. C. New to Kansas.
977*a*. Brachynus similis Lec. H. New to Kansas.
983? kansanus Lec. C.
995. Chlænius fuscicornis Dej. C.
1018. tricolor Dej. C.
1021. pennsylvanicus Say. H.
1032. tomentosus Say. M. C.
1052. Geopinus incrassatus Dej. H.
1054. Nothopus zabroides Lec. M. C.

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*The species credited to Ford county in this list were taken at Dodge City during a detention by washouts on the railroad while the collecting party was *en route* to Coolidge, in Hamilton county, in 1902.

1056. Cratacanthus dubius Beauv. H. M. C
1059. Agonoderus lineola Fab. H. C.
1061. pallipes Fab. H. M. C.
1067. Discoderus parallelus Hald. H. C.
1074. Gynandropus hylacis Say. H.
1083. Harpalus caliginosus Fab. H. C.
1087. pennsylvanicus De G. H. C.
1091. fallax Lec. C.
1110. funestus Lec. H. C. New to Kansas.
1125. Selenophorus pedicularius Dej. C.
1125. var. semiopacus. C. New to Kansas.
1140. Stenolophus conjunctus Say. H. C. Taken also in Ford county.
1158. Bradycellus rupestris Say. C.
1177. Anisodactylus harpaloides Laf. C. New to Kansas.
1178. dulcicollis Laf. C.
1179. opaculus Lec. C. New to Kansas.
1208. lugubris Dej. C.
1209. sericeus Harr. H.

Family HALIPLIDÆ.

1221. Haliplus triopsis Say. H.

Family DYTISCIDÆ.

1476. Eretes sticticus Linné. C.

Family GYRINIDÆ.

1536. Dineutes assimilis Aubé. C.

Family HYDROPHILIDÆ.

1546. Helophorus linearis Lec. C.
1586. Hydrophilus triangularis Say. H. C.
1589. Tropisternus nimbatus Say. C.
1597. Hydrocharis obtusatus Say. H.
1607. Berosus subsignatus Lec. C. New to Kansas.
1613. infuscatus Lec. C.
1621. Laccobius agilis Rand. C.
1634. Helochares diffusus Lec. C.
1635. fuscus Mots. H.

Family SILPHIDÆ.

1705. Silpha truncata Say. H.

Family STAPHYLINIDÆ.

2119. Creophilus villosus Grav. H.
2164. Philonthus semiruber Horn. C. New to Kansas.
2170. flavolimbatus Er. C.
2182. alumnus Er. C. New to Kansas.
2274. Xantholinus emmesus Grav. C.
2705. Bledius gularis Lec. C.
2712. armatus Er. H. New to Kansas.
2738? suturalis Lec. H. New to Kansas.

Family PHALACRIDÆ.

2993. Phalacrus politus Melsh. H.
3005. Olibrus consimilis Marsh. H.

Family COCCINELLIDÆ.

3046. Hippodamia convergens Guér. H. C.
3051. parenthesis Say. M.
3065. Olla oculata Fab. H. M.
3065*a*. abdominalis Say. H. M. C.
3094. Brachyacantha dentipes Fab. C.
3095*a*. decem-pustulata Melsh. C.
3095*d*. albifrons Say. C.
3101. Hyperaspis fimbriolata Melsh. M.
3126. Hyperaspidius trimaculatus Linné. H. C.

Family EROTYLIDÆ.

3206. Languria læta Lec. H. M. C.
3209. Acropteroxys gracilis Newm. H.

Family MYCETOPHAGIDÆ.

3409. Typhœa fumata Linné. C.

Family DERMESTIDÆ.

3418. Dermestes marmoratus Say. H. C.
3418*a*. mannerheimii Lec. H. C.

Family HISTERIDÆ.

3461. Hololepta fossularis Say. C.
3468. Hister arcuatus Say. H. New to Kansas.
3473. ulkei Horn. M. C.
3490. abbreviatus Fab. H. M. C.
3511. pollutus Lec. Taken in Ford county only.
3553. Paromalus estriatus Lec. C.
3583. Saprinus lugens Er. H. C.
3585. pennsylvanicus Payk. H. M. C.
3590. assimilis Payk. H. C.
3625. patruelis Lec. C.

Family NITIDULIDÆ.

3675. Carpophilus melanopterus Er. H.
3675. var. rufus Murr. H.
3719. Nitidula bipustulata Linné. C.
3720. rufipes Linné. C.
3721. ziczac Say. C.
3744? Amphicrossus ciliatus Oliv. C.

Family MONOTOMIDÆ.

3866. Hesperobænus rufipes Lec. M.

Family HETEROCERIDÆ.

3966. Heterocerus limbatus Kies. H.
3968. pallidus Say. H. C.

Family ELATERIDÆ.

4085. Lacon rectangularis Say. H. M. C.
4104. Cardiophorus cardisce Say. C.
4109. gagates Er. C. New to Kansas.
10052. Cryptohypnus cucullatus Horn. H. New to Kansas.
4185. Monocrepidius vespertinus Fab. M.
4190. auritus Hbst. C.
4190. auritus, var. C.
4253. Drasterius elegans Fab. H.
4324. Melanotus exuberans Lec. H. C. Taken also in Ford county.
4343. sagittarius Lec. C. New to Kansas.

Family BUPRESTIDÆ.

4600. Buprestis confluens Say. H.
4639. Chrysobothris femorata Fab. C.
4639*a*. alabamæ Gory. C. New to Kansas.
10071. purpureovittata Horn. C.
4699. Acmæodera pulchella Hbst. H. M. C.
4742. Agrilus politus Say. H. M.
4744. cuneus Lec. H. M. C.
4746. egenus Gory. C.
4747. lacustris Lec. C.
4750. muticus Lec. H. M. C.
4751. pulchellus Bland. C. New to Kansas.

Family LAMPYRIDÆ.

4794. Plateros modestus Say. C.
4820. Pyropyga decipens Harr. C.
4876. Chauliognathus marginatus Fab. C.
4932. Telephorus carolinus Fab. Taken in Ford county only.
4940. scitulus Say. H.

Family MALACHIDÆ.

4994. Collops tricolor Say. C.
4996. eximius Er. H. New to Kansas.
5002. bipunctatus Say. H. M.
5004. quadri-maculatus Fab. H. M. C.
5009. limbellus G. & H. H. M. C.
5040. Anthocomus ventralis Horn. M. New to Kansas.
5080. Pristocelis erythropus Lec. H.

Family CLERIDÆ.

5147. Cymatodera undulata Say. C.
5164. Clerus spinolæ Lec. M.
..... atriventris Lec. M. New to Kansas.

5195. Hydnocera pubescens Lec. M. C.
5196. scabra Lec. M. New to Kansas.
5230. Necrobia rufipes Fab. C.

Family PTINIDÆ.

5239. Ptinus fur Linné. C.
5308. Hemiptychus punctatus Lec. H.
5309. gravis Lec. H. M.
5334. Ptilinus thoracicus Rand. C.

Family SCARABÆIDÆ.

5426. Canthon ebenus Say. H. C.
5428. praticola Lec. H. C.
5435. lævis Drury. H. M. C.
5452. Phanæus carnifex Linné. H. C. Taken in Ford county also.
5458. Onthophagus hecate Panz. H. Taken also in Ford county.
5462. tuberculifrons Harold. C.
5463. pennsylvanicus Harold. H.
5482. Rhyssemus sonatus Lec. C. New to Kansas.
5490. Atænius figurator Har. H. New to Kansas.
5493. stercorator Fab. H.
5499. abditus Hald. H. C.
10191. californicus Horn. H.
5515. Aphodius denticulatus Horn. H.
5517. fimetarius Linné. C.
5528. granarius Linné. H. C.
5445. rubeolus Beauv. H.
5546. stercorosus Melsh. C.
5570. walshii Horn. H.
5578. Ochodæus musclus Say. H. C.
5581. biarmatus Lec. H. C.
5588. Bradycinetus fossator Hald. H.
5589. serratus Lec. C.
5590*a*. Bolboceras tumefactus Beauv. C.
5591. lazarus Fab. H. C.
5613. Trox scabrosus Beauv. C.
5616. suberosus Fab. H. C.
5617. punctatus Germ. H. M. C.
5618. tuberculatus De G. H.
5620. sonoræ Lec. C.
5624. sordidus Lec. C.
5630. atrox Lec. H. M.
5698? Diazus rudis Lec. H.
5717. Diplotaxis frondicola Say. H. M. C.
5737. Lachnosterna cribrosa Lec. C. New to Kansas.
5739. lanceolata Say. H. C.
5772. crassissima Blanch. H. C.
5818. Listrochelus fimbripes Lec. C. New to Kansas.
5831. Anomala binotata Gyll., var. C.
5842. Strigoderma arboricola Fab. M. C.
5851. Cotalpa lanigera Linné. C.

5858. Cyclocephala immaculata Oliv. H.
5867. Chalepus obsoletus Lec., var. H. Taken also in Ford county.
5869. Ligyrus gibbosus De G. H. C.
5871. relictus Say. H. C. Taken also in Ford county.
10277. Stephanucha pilipennis Kraatz. C.
5901. Euphoria kernii Hald. H. M. C.
5901. kernii, var. H. M.
5904. sepulchralis Fab. C.
5911. inda Linné. H. C.
5914. Cremastochilus saucius Lec. H. C.
5925. knochii Lec. H. C.
5926. nitens Lec. C.
5939. Trichius affinis Gory. C.

Family CERAMBYCIDÆ.

5963. Prionus fissicornis Hald. H. C.
5965. Homæsthesis integer Lec. H.
6038. Chion cinctus Drury. C.
6140. Batyle ignicollis Say. H. M.
6140. ignicollis, var. M.
6141. suturalis Say. H. C.
6141. var. pearsalli Bland. H. M. C. New to Kansas.
6208. Clytanthus albofasciatus Lap. C. New to Kansas.
6292. Typocerus velutinus Oliv. H.
6296. sinuatus Newm. H. M. C.
6296. sinuatus, var. H. M.
6369. Monilema annulatum Say. H. M.
6381. crassum Lec. C. New to Kansas.
6471. Ataxia crypta Say. M. C.
6490. Mecas cana Newn. H. M. C.
6492. pergrata Say. H. C.
6495. Oberea oculaticollis Say. H.
6496. var. basalis Lec. H.
6501. ocellata Hald. C.
6506. Tetrops canescens Lec. H. M. C.
6511. Tetraopes tetraophthalmus Forst. H.
6513. femoratus Lec. H. C.
6513*b*. basalis Lec. H. New to Kansas.
6513*c*. oregonensis Lec. H. New to Kansas.
6515. canescens Lec. H. M.
6516. Amphionycha flammata Newm.

Family CHRYSOMELIDÆ.

6564. Lema texana Cr. C. New to Kansas.
6574. nigrovittata Guér. C. New to Kansas.
6587. Coscinoptera axillaris Lec. H. C.
6598. Saxinis omogera Lac. H. C.
6614*a*. Cryptocephalus notatus Fab. C.
6626. confluens Say. M. C.
6658. Pachybrachys virgatus Lec. H. C.
6659. litigiosus Suffr. H. C.

6659. Pachybrachys litigiosus, var. M.
6665. pubescens Oliv. H. C.
6675. pectoralis Melsh. C.
6676. cælatus Lec. H.
6678. livens Lec. H. M. C.
6683. carbonarius Hald. H.
6740. Myochrous squamosus Lec. C.
6747. Typophorus sex-notatus Say. H.
6747. var. vittatus Horn. H.
6750. pumilus Lec. H.
6753. Metachroma angustula Cr. C.
6756. dubiosum Say. C.
6755. var. f. Horn. H.
6756. var. g. Horn. M.
10354. æneicolle Horn. C. New to Kansas.
10359. parallelum Horn. C.
10363. Graphops varians Lec. C.
10369. Colaspoides opacicollis Horn. C. New to Kansas.
6772. Chrysodina globosa Say. H. M. C.
6774. Colaspis, var. lineata. C.
6778. Notodonta tristis Oliv. C.
6789. Doryphora decem-lineata Say. H. M. C.
6795. Chrysomela exclamationis Fab. H. C.
6796. conjuncta Rog. H.
6796. var. pallida Say. M. C. New to Kansas.
6800. disrupta Rog. H. M. C.
6800. disrupta, var. M. C.
6808. scalaris Lec. C.
6821. auripennis Say. C.
6837. Lina lapponica Linné. C.
6839. scripta Fab. H.
6879. Diabrotica tricincta Say. M.
6881. duodecem-punctata Oliv. H.
6881*a*. tenella Lec. C.
6884. blandula Lec. H.
6885. vittata Fab. H.
6909. Galerucella notulata Fab. C. New to Kansas.
6913. Monoxia puncticollis Say. C.
6949. Disonycha quinque-vittata Say. H. M.
6954. abbreviata Melsh. C.
6957. triangularis Say. C.
6972. Haltica punctipennis Lec. M.
6980. Crepidodera helxines Linné. H.
10458. Phyllotreta pusilla Horn. M. New to Kansas.
7040. Chætocnema denticulata Ill. C.
7068. Microrhopala cyanea Say. M. C.
7072. Stenopodius flavidus Horn. C. New to Kansas.
7097*b*. Cassida ellipsis Lec. H. M. C.
7104. Coptocycla signifera Herbst. H.
7109. Chelymorpha argus Licht. H. M. C.

Family Bruchidæ.

7124. Bruchus discoideus Say. H. M.
7136. pauperculus Lec. C.
7142. uniformis Lec. M. New to Kansas.
7143. bisignatus Horn. C.
7148. fraterculus Horn. H. M. C.
7149. amicus Horn. M.
7157. exiguus Horn. C.
10475. Zabrotes subnitens Horn. C. New to Kansas.

Family Tenebrionidæ.

7167. Edrotes rotundus Say. M. C.
7177. Trimytis pruinosa Lec. H. M.
7203. Epitragus canaliculatus Say. M.
7251. Ologlyptus anastomosis Say. M.
7314. Eusattus difficilis Lec. C. New to Kansas.
7316. Eleodes obscura Say. M.
7318. suturalis Say. H. M. C.
7318*a*. texana Lec. H.
7320. tricostata Say. H. M. C.
7323. obsoleta Say. H. M. C.
7327. extricata Say. H. M. C.
7331. longicollis Lec. H.
7340. hispilabris Say. H. M. C.
7357. opaca Say. H. M. C. Taken also in Ford county.
7358. fusiformis Lec. M.
7364. Embaphion muricatum Say. H. M. C.
7416. Tenebrio obscurus Fab. H. C.
7433. Blapstinus near dilatatus Lec. C. New to Kansas.
7434. fortis Lec. C. New to Kansas.
7438. pratensis Lec. C.
7439. vestitus Lec. H. C.
7460. Ammodonus fossor Lec. C.

Family Mordellidæ.

7779. Mordella melæna Germ. H. M.
7780. scutellaris Fab. H.
7784. lunulata Helm. H. New to Kansas.
..... n. sp. H. New to Kansas.
7816. Mordellistena comata Lec. C. New to Kansas.
7846. unicolor Lec. H.
7858. æthiops Smith. C. New to Kansas.
7859. texana Smith. M. New to Kansas.
7866. æmula Lec. M.

Family Anthicidæ.

7918. Notoxus talpa Laf. M. C.
7922. calcaratus Horn. M. New to Kansas.
7956. Anthicus ephippium Laf. H.
7959. cervinus Laf. H.
7959. cervinus, var. H.
..... mimus Casey. H. New to Kansas.
7967. near spretus Lec. C. New to Kansas.

Family MELOIDÆ.

8024. Nemognatha lurida Lec. M. C.
8027. bicolor Lec. H. C. New to Kansas.
8031. piezata Fab. H. M. C.
8043. Gnathium minimum Say. C.
8061. Macrobasis unicolor Kirby. H.
8068. immaculata Say. H. M.
8068. var. fulvescens Lec. H. M. C.
8069. segmentata Say. H. M. C.
8079. Epicauta trichrus Pall. C.
8082. ferruginea Say. C.
8083. sericans Lec. H.
8092. maculata Say. H. M. C.
8092. maculata, var. H. M.
8104. pennsylvanica De G. C.
8109. Pyrota engelmanni Lec. C.
8114. Pyrota discoidea Lec. H. M. C. Taken also in Ford county.
8119. sinuata Oliv. C. New to Kansas.
8140. Cantharis fulvipennis Lec. C.
8145. reticulata Say. H. C.

Family RHIPIPHORIDÆ.

8174. Rhipiphorus dimidiatus Fab. C.

Family RHYNCHITIDÆ.

8215. Rhynchites hirtus Fab. H.

Family BYRSOPIDÆ.

8229. Thecesternus humeralis Say. M. C.

Family OTIORHYNCHIDÆ.

8241. Calyptillus cryptops Horn. C.
8242. Ophryastes vittatus Say. M. C. New to Kansas.
8243. tuberosus Lec. H.
8244. latirostris Lec. H. C.
8245. sulcirostris Say. C.
8249. Eupagoderes sordidus Lec. H.
8267. Peritaxia hispida Horn. C. New to Kansas.
8312. Tanymecus confertus Gyll. H.
8321. Aramigus tesselatus Say. C.
8321. tesselatus, var. H.
8324. Phacepholis obscura Horn. C. New to Kansas.
8325. candida Horn. C.

Family CURCULIONIDÆ.

8370. Apion ovale Smith. M.
8397. oblitum Smith. C.
8412. griseum Smith. M.
10822. Macrops interpunctatulus Dietz. C. New to Kansas.

10827. Macrops near montanus Dietz. C. New to Kansas.
..... Macrops sp. H.
8491. Lixus sylvius Boh. C. New to Kansas.
8493. punctinasus Lec. H.
8503. læsicollis Lec. C.
8513. Stephanocleonus plumbeus Lec. C. New to Kansas.
8515. Cleonopsis pulvereus Lec. H.
8518. Cleonus trivittatus Say. H. C.
10866. grandirostris Casey. M. New to Kansas.
8529. Dorytomus mucidus Say. H.
8536. squamosus Lec. H.
8555. Smicronyx tychoides Lec., var. H. New to Kansas.
..... undet. sp. H.
8571. Endalus limatulus Gyll. H. C.
8572. æratus Lec. H. M. New to Kansas.
8575? ovalis Lec. C. New to Kansas.
8632. Anthonomus fulvus Lec. C.
10999. albopilosus Dietz. M.
8681. Macrorhoptus estriatus Lec. H. C.
8720. Conotrachelus nivosus Lec. C.
8736. leucophæatus Fah. H. M.
8742. Rhyssematus lineaticollis Say. H. M.
8758. Acalles nobilis Lec. C. New to Kansas.
8761. turbidus Lec. M. C.
8779. Tyloderma foveolatum Say. C.
8812. Copturus nanulus Lec. C.
8814. adspersus Lec. M.
8828. Cœliodes curtus Say. C.
8872. Baris transversa Say. M. C.
8882. pruinosa Lec. C.
11127. Onychobaris millepora Casey. C. New to Kansas.
8884. Trichobaris trinotata Say. C.
8916? Calandrinus grandicollis Lec. C. New to Kansas.
8917. Centrinus scutellum-album Say. M.
8931. griseus Lec. M.
8932. decipiens Lec. M.
11166. denticornis Casey. H. M. New to Kansas.
11169. pulverulentus Casey. H. M. C.
..... undet. sp. H.

Family Calandridæ.

8978. Rhodobænus tredecimpunctatus Ill. H. M. C.
8993. Sphenophorus sculptilis Uhler. C.
8998. placidus Say. C.
9000. parvulus Gyll. C.
9027. Cossonus corticola Say. H. C.
..... Rhyncholus eximius Lec. H. New to Kansas.

Family Anthribidæ.

9227. Brachytarsus vestitus Lec. C. New to Kansas.

SUMMARY OF SPECIES AND VARIETIES OF COLEOPTERA.

Cicindelidæ	20	Malachidæ	7
Carabidæ	76	Cleridæ	6
Haliplidæ	1	Ptinidæ	4
Dytiscidæ	1	Scarabæidæ	53
Gyrinidæ	1	Cerambycidæ	26
Hydrophilidæ	9	Chrysomelidæ	58
Silphidæ	1	Bruchidæ	8
Staphylinidæ	8	Tenebrionidæ	22
Phalacridæ	2	Mordellidæ	9
Coccinellidæ	9	Anthicidæ	7
Erotylidæ	2	Meloidæ	19
Mycetophilidæ	1	Rhipiphoridæ	1
Dermestidæ	2	Rhynchitidæ	1
Histeridæ	10	Byrsopidæ	1
Nitidulidæ	6	Otiorhynchidæ	12
Monotomidæ	1	Curculionidæ	43
Heteroceridæ	2	Calandridæ	6
Elateridæ	10	Anthribidæ	1
Buprestidæ	11	Total number	462
Lampyridæ	5		

Of the above 462 species and varieties, 79, more than one-sixth of the entire number, have not been previously taken in Kansas. Of these 79 additions to the Kansas list of Coleoptera, 47 were taken in Clark county, 25 in Hamilton county, and 7 in Morton county. Of the entire number of 462 species, 172 were taken in Clark county only, 108 in Hamilton county only, 31 in Morton county only, 49 in all three counties, 61 in both Clark and Hamilton counties, 21 in both Hamilton and Morton counties, 18 in both Clark and Morton counties, and two in Ford county only. The elevations of the three collection camps above the sea are as follows: Clark county, 1962 feet; Morton county, 3200 feet; Hamilton county, 3350 feet.

LIST OF LEPIDOPTERA.

This list contains seventy-nine species of Lepidoptera not previously included in Kansas lists. The large number of additions is partly due to the fact that no lists of Kansas Lepidoptera have been published since the author's catalogue of 503 species of the Lepidoptera of eastern Kansas (Trans. Kan. Acad. of Science, vol. IV, pp. 29–59, 1875) and his list of forty-five additional species (Trans. Kan. Acad. of Science, vol. VII, pp. 102–105, 1881).

For the determination of species not determinable from the University collections, the author is indebted to Dr. Henry Skinner, Prof. John B. Smith, and Prof. C. H. Fernald.

The numbers and nomenclature are those of Smith's check-list of 1903.

Family NYMPHALIDÆ.

1. Danais archippus Fab. C.
2. berenice Cram. C. New to Kansas.
10. Euptoieta claudia Cram. H. C.
120. Phyciodes ismeria Bd. & Lec. C.
127. camillus Edw. H. C. New to Kansas.
131. picta Edw. C. New to Kansas.
141*b*. Grapta umbrosa Lint. C.
153. Vanessa antiopa Linn. C.
156. Pyrameis atalanta Linn. C.
158. cardui Linn. C.
184. Apatura antonia Edw. C. New to Kansas.

Family LYCÆNIDÆ.

283. Thecla melinus Hbn. C.
378. Lycæna acmon Db. & Hew. C.
387. isola Reak. C.
393. exilis Bdv. H. C. New to Kansas.

Family PAPILIONIDÆ.

407. Pieris protodice Bd. & Lec. C.
411*a*. Nathalis irene Fitch. H. C.
428. Kricogonia lycide Godt. H.
438. Colias eurytheme Bdv. C.
438*b*. keewaydin Edw. C. New to Kansas.
454. Terias nicippe Cram. C.
469. Papilio philenor Linn. C.

Family HESPERIDÆ.

512. Pamphila ottoe Edw. C. New to Kansas.
519. uncas Edw. H. C.
557. near deva Edw. C. New to Kansas.
577. vitellius Fabr. C. New to Kansas.
613. Pyrgus tessellata Scudd. H.
632. Nisoniades near tristis Bdv. C.
649. Pholisora catullus Fabr. C.
651. pirus Edw. H. New to Kansas.
676. Eudamus tityrus Fabr. H.

Family SPHINGIDÆ.

718. Lepisesia juanita Strck. H. M. C.
764*a*. Sphinx albescens Tepper. H. New to Kansas.
788. Marumba modesta Harr. C.
789*a*. Smerinthus geminatus Say. H. C.

Family SYNTOMIDÆ.

859. Scepsis fulvicollis Hbn. H.
864. Lycomorpha pholus Dru. C.

Family LITHOSIIDÆ.

880. Hypoprepia miniata Kirby. C. New to Kansas.

Family ARCTIIDÆ.

950. Estigmene acræa Dru. C.
993. Apantesis nais Dru. C.
1015. Euchætes spragueia Grt. H. C.

Family AGARISTIDÆ.

1066. Copidryas gloveri G. & R. H. New to Kansas.

Family NOCTUIDÆ.

1131. Acronycta transversata Smith. H. New to Kansas.
1152. connecta Grt. H.
1245. Caradrina extimia Walk. H. New to Kansas.
1349. Hadena semilunata Grt. H. New to Kansas.
1449. Prodenia ornithogalli Gn. C.
1692. Chorizagrotis auxiliaris Grt. C.
1693. introferens Grt. H. C. New to Kansas.
1694. agrestis Grt. H. C. New to Kansas.
1695. soror Smith. H. New to Kansas.
1989. Mamestra capsularis Gn. C.
2003. trifolii Rott. H.
2176. Leucania neptis Smith. H. New to Kansas.
2187. phragmatidicola Gn. C.
2188. imperfecta Smith. H. New to Kansas.
2491. Dasyspoudæa meadii Grt. H. C. New to Kansas.
2502. Heliocheilus paradoxus Grt. H.

2504. Heliothis armiger Hbn. C.
2505. phlogophagus Grt. C.
2507. suavis Hy. Edw. H. New to Kansas.
2508. Rhodophora gauræ S. & A. H.
2511. citronellus Grt. C. New to Kansas.
2513. Rhododipsa volupia Fitch. H. C.
2523. Pseudacontia crustaria Morr. H. New to Kansas.
2545. Schinia simplex Smith. H. C. New to Kansas.
2558. near lynx Gn. C.
2559. roseitincta Harv. C. New to Kansas.
2568. jaguarina Gn. H. C.
2597. Palada scarletina Smith. H. New to Kansas.
2673. Cirrophanus duplicatus Smith. H. New to Kansas.
2679. Stiria rugifrons Grote. H.
2711. Plusia pseudogamma Grt. C.
2744*a*. Autographa simplex Gn. C.
2773. Marasmalus inficita Walk. C.
2862. Xanthoptera near nigrofimbria Gn. H.
2890. Tornacontia sutrix Grt. H. New to Kansas.
2895. Therasea angustipennis Grt. C. New to Kansas.
2912. Acontia near biplaga Gn. C.
2935. candefacta Hbn. H. C.
2937. Fruva fasciatella Grt. C.
2995. Drasteria crassiuscula Harr. H. C. New to Kansas.
3019. Cirrhobolina deducta Morr. H. M. New to Kansas.
3020. mexicana Behr. H. M. New to Kansas.
3021. vulpina Hy. Edw. M. New to Kansas.
3033. Syneda socia Behr. H. C. New to Kansas.
3044. ingeniculata Morr. C. New to Kansas.
3217. Homoptera lunata Dru. H.
3219. rubi Hy. Edw. H. C. New to Kansas.
3237. Epizeuxis lubricalis Geyer. C.
3312. Plathypena scabra Fabr. C.

Family NOTODONTIDÆ.

3413. Schizura unicornis S. & A. H.
3424. Harpyia cinerea Wlk. H. New to Kansas.

Family LASIOCAMPIDÆ.

3470*a*. Clisiocampa incurva Hy. Edw. H. New to Kansas.

Family GEOMETRIDÆ.

3743. Hæmatopsis grataria Fabr. H.
3808. Eois perirrorata Pack. C.
3811. tacturata Walk. C. New to Kansas.
3838. Chlorochlamys chloroleucaria Gn. C.
3878. Fernaldella fimetaria G. & R. C. New to Kansas.
3898. Deilinia elimaria Hulst. H. New to Kansas.
3929. Sciagraphia punctolineata Pack. C. New to Kansas.
3948. Macaria s-signata Pack. C. New to Kansas.
4025. Euaspilates spinitaria Pack. H. C. New to Kansas.
4057. Platea trilinearia Pack. H. C. New to Kansas.

Family Cossidæ.

4487. Prionoxystus robiniæ Peck. H.

Family Sesiidæ.

4505. Melittia satyriniformis Beut. C.
4506. snowii Hy. Edw. H. New to Kansas.
4521. Memythrus cupressi Hy. Edw. H. New to Kansas.
4588. Sesia mariona Beut. C. New to Kansas.
4602. Calasesia coccinea Beut. C. New to Kansas.
4603. Paranthrene maculipes G. & R. M. C. New to Kansas.

Family Pyraustidæ.

4651. Diastictis fracturalis Zeller. H. C. New to Kansas.
4709. Nomophila noctuella S. V. C.
4725. Loxostege sticticalis Linn. H.
4726. commixtalis Wlk. H. C.
4744. vibicalis Zell. C. New to Kansas.
4754. Tholeria reversalis Gn. H. New to Kansas.
4790. Pyrausta near theseusalis Wlk. C. New to Kansas.
..... undet. sp. C.
4831. signatalis Wlk. C. New to Kansas.
4846. Eustixia octonalis Zell. C.
4849. Noctuella near thalialis Wlk. C. New to Kansas.

Family Pyralididæ.

4888. Pyralis farinalis Linn. H. C.
4905. Galasa rubidana Wlk. C.
4917*a*. Schœnobius dispersellus Rob. C. New to Kansas.
4938. Crambus leachellus Zinck. C.
4960. Crambus near ruricolellus Zell. C. New to Kansas.
4985. Thaumatopsis pexella Zell. C. New to Kansas.
4991. Ommatopteryx ocellea Haw. C. New to Kansas.
5020. Epipaschia zelleri Grt. C.
5253. Homœosoma electellum Hulst. C. New to Kansas.
5314. Cœnochroa illibella Hulst. C. New to Kansas.

Family Pterophoridæ.

5351. Pterophorus homodactylus Wlk. C. New to Kansas.

Family Tortricidæ.

5482. Eucosma quinquemaculana Rob. C.
5485. agassizii Rob. C. New to Kansas.
5501. albiguttana Zell. C. New to Kansas.
5533. pulveratana Wlsm. C. New to Kansas.
5576. Cydia striatana Clem. C. New to Kansas.
5601. vestaliana Zell. C. New to Kansas.
5605. argenticostana Wlsm. C. New to Kansas.
5614. ochreicostana Wlsm. C. New to Kansas.
5626. Proteopteryx spoliana Clem. C. New to Kansas.

5782. Archips near argyrospila Wlk. C. New to Kansas.
5783. semiferana Wlk. C. New to Kansas.
5857. Phalonia felix Wlsm. C. New to Kansas.

Family GELECHIIDÆ.

6116. Aristotelia near roseosuffusella Clem. C. New to Kansas.

Family ELACHISTIDÆ.

6646. Scythris eboracensis Zell. C. New to Kansas.

Family TINEIDÆ.

7112. Pronuba yuccasella Riley. H. M. C.
7123. Hypocolpus mortipenellus Grt. C. New to Kansas.

SUMMARY OF SPECIES OF LEPIDOPTERA.

Nymphalidæ	11	Geometridæ	10
Lycænidæ	4	Cossidæ	1
Papilionidæ	7	Sesiidæ	6
Hesperidæ	9	Pyraustidæ	11
Sphingidæ	4	Pyralidæ	10
Syntomidæ	2	Pterophoridæ	1
Lithosiidæ	1	Tortricidæ	12
Arctiidæ	3	Gelechiidæ	1
Agaristidæ	1	Elachistidæ	1
Noctuidæ	50	Tineidæ	2
Notodontidæ	2	Total number of species	150
Lasiocampidæ	1		

Of the above 150 species of Lepidoptera, 87 were taken in Clark county only, 35 in Hamilton county only, 1 in Morton county only, 2 in all three counties, 22 in both Clark and Hamilton counties, 2 in both Hamilton and Morton counties, and 1 in Clark and Morton counties.

Of the 79 species "new to Kansas," 43 were taken in Clark county only, 20 in Hamilton county only, 1 in Morton county only, 12 in Hamilton and Clark counties, 2 in Hamilton and Morton counties, and 1 in Clark and Morton counties.